

## **REMARKS**

### **A. 35 U.S.C. § 102**

#### **1. O'Connor**

In the Office Action of July 11, 2003, claims 1, 8, 15, 25, 32 and 34 were rejected under 35 U.S.C. § 102(b) as being anticipated by O'Connor. Applicants traverse this rejection for several reasons. First claims 1 and 15 have been canceled and so their rejections have been rendered moot and should be withdrawn.

Applicants traverse the rejection to the extent that it fails to identify what is being relied on as the appendages as recited in independent claims 1 and 15. Without such identification, it leaves it to the Applicants to guess the basis of the rejection which is fundamentally unfair.

The rejection is traversed for the additional reason that the Office Action has totally relied on the Search Report for the corresponding United Kingdom patent application. The Applicants filed the present application in the United States in order for a United States Patent Examiner, not a British Examiner, to provide a full and concise examination of the recited claims. Accordingly, Applicants demand for the reasons stated above that an independent and more detailed examination of the claims be rendered in the next Office Action.

If the rejection is relying on the two ribs extending from the side of the element 1,

then the rejections of claims 8, 25, 32 and 34 are overcome since they now depend directly or indirectly on claims 2 and 16 that recite that one of the appendages is curved. The two ribs extending from the side of element 1 of O'Connor are straight and so the rejections are overcome and should be withdrawn.

Please note that the amendments to claims 8 and 32 are being presented to redefine/rename the invention a "heat exchanger tube system" and to provide additional coverage for such a heat exchanger tube system by amending their dependency. Furthermore, claim 25 is being amended to redefine/rename the invention a "heat exchanger tube system." Accordingly, the amendments are not being presented for reasons of patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), *overruled in part*, 535 U.S. 722 (2002).

**2. DT 2239069**

Claims 1, 8, 15, 25, 32 and 34 were rejected under 35 U.S.C. § 102(b) as being anticipated by the '069 reference. Applicants traverse this rejection for several reasons. First claims 1 and 15 have been canceled and so their rejections have been rendered moot and should be withdrawn.

Applicants traverse the rejection for the reasons stated above in Section A.1 in that the Office Action fails to identify what is being relied on as the appendages as recited

in independent claims 1 and 15 and totally relies on the Search Report for the corresponding United Kingdom patent application. However, the Search Report is silent as to the '069 reference.

If the rejection is relying on the two ribs extending from the side of the element 1, then the rejections of claims 8, 25, 32 and 34 are overcome since they now depend directly or indirectly on claims 2 and 16 that recite that one of the appendages is curved. The two ribs extending from the side of element 1 of the '069 reference are straight and so the rejections are overcome and should be withdrawn.

### **3. Awe et al.**

Claims 1-4, 8-11, 15-18, 25-28 and 32-35 were rejected under 35 U.S.C. § 102(b) as being anticipated by Awe et al. Applicants traverse this rejection for several reasons. First claims 1 and 15 have been canceled and so their rejections have been rendered moot and should be withdrawn.

Regarding the remaining claims, claims 2 and 16 have been amended to be in independent form and have been amended to recite that the tube has a cross section perpendicular to the longitudinal direction of the tube that has a pair of sides connected to a nose end that extends a distance less than the distance that the pair of sides extend along the axial direction. With this definition in mind, neither the top flanges or bottom flanges 25 have a free end that is curved toward the other free end of the flange. Accordingly,

claims 2 and 16 are not anticipated by Awe et al.

Besides not being anticipated by Awe et al., claims 2 and 16 are not rendered obvious by Awe et al. since there is no suggestion in Awe et al. to have a free end of and appendage of either the top flange or the bottom flange extend toward another appendage of the same flange. Awe et al. teaches away from such an orientation in order to bind the fins between the flanges (Col. 2, ll. 17-24).

Please note that the amendment to claim 34 is being presented to provide additional coverage for a heat exchanger system by amending its dependency. Furthermore, claims 3, 4, 9-11 and 33 are being amended to redefine/rename the invention a “heat exchanger tube system.” Accordingly, the amendments are not being presented for reasons of patentability as defined in *Festo*.

#### **4. U.K. Patent Reference No. 2323155**

Claims 1-4, 8-11, 15-18, 25-28 and 32-35 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.K. Patent Reference No. 2323155 (“the ‘155 reference”). Applicants traverse this rejection for several reasons. First claims 1 and 15 have been canceled and so their rejections have been rendered moot and should be withdrawn.

Applicants traverse the rejection for the reasons stated above in Section A.1 in that the Office Action fails to identify what is being relied on as the appendages as recited in independent claims 1 and 15 and totally relies on the Search Report for the

corresponding United Kingdom patent application.

If the rejection is relying on the two pairs of ends extending from the top and bottom of the heat exchanger of FIG. 8, then the rejections are improper since original claims 1 and 15 and newly amended claims 2 and 16 recite that the appendages are spaced from one another and not attached to one another. In contrast, the two pairs of ends extending from the top and bottom of the heat exchanger of FIG. 8 of the '155 reference are attached to one another. Accordingly, the rejection is improper and should be withdrawn.

Besides not being anticipated by the '155 reference, claims 2 and 16 are not rendered obvious by the '155 reference. In particular, there is no motivation in the '155 reference to have the pairs of ends separated from one another in FIG. 8 since that would lead to the refrigerant leaking from the tubes 2 and 4.

**B. 35 U.S.C. § 102/§ 103**

Claims 1-4, 8-11, 15-18, 25-28 and 32-35 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, being obvious under 35 U.S.C. § 103 as being obvious in view of European reference 0179381 ("the '381 reference"). Applicants traverse this rejection for several reasons. First claims 1 and 15 have been canceled and so their rejections have been rendered moot and should be withdrawn.

Applicants traverse the rejection for the reasons stated above in Section A.1 in

that the Office Action fails to identify what is being relied on as the appendages as recited in independent claims 1 and 15 and totally relies on the Search Report for the corresponding United Kingdom patent application. The flawed nature of the rejection is further demonstrated that there is no explanation why Section 103 is being relied on in the alternative. Applicants demand clarification of this rejection.

If the rejection is relying on the elements 12 and 13 extending from each end of the element 11 as shown on page 6 of the Office Action, then Applicants have several comments. First, Applicants do not believe that there would be elements 12 and 13 extending from each end if the element 11 was located at the boundary of the system shown in FIG. 3. The ends defining the exterior side of the system would not have elements 12 and 13.

Assuming for arguments sake that the element 11 of the '381 reference has the shape shown in the Office Action when it is located in the interior of the system, then the rejections are overcome by the fact that claims 2 and 16 have been amended to clarify that the appendages are only attached to the end. However, as shown in FIG. 3 of the '381 reference, the elements 12 and 13 are attached to an end of element 11 and elements 12 and 13 of an adjoining element 11. Thus, the claims are not anticipated by the '381 reference.

Besides not being anticipated by the '381 reference, claims 2 and 16 are not

rendered obvious by the '381 reference. In particular, there is no motivation in the '381 reference to have the elements 12 and 13 unattached to elements 12 and 13 of an adjoining element 11 since that is the sole function of elements 12 and 13.

If the rejection is based on a single element 11 that is unattached to other elements 11, then the rejection is overcome since claims 2 and 16 have been amended to clarify that the tube contains a heat exchanging medium. Since there is no disclosure or suggestion to have an isolated element 11 contain a heat exchanging medium, the rejection is overcome.

**C. 35 U.S.C. § 103**

**1. O'Connor and Yoshi et al.**

Claims 1-4, 8-11, 15-18, 25-28 and 32-35 were rejected under 35 U.S.C. § 103 as being obvious in view of O'Connor when combined with Yoshi et al. Applicants traverse this rejection for several reasons. First, claims 1 and 15 have been canceled rendering their rejection moot.

As pointed out above in Section A.1, O'Connor fails to teach using curved ribs. Yoshi et al. does not cure the deficiencies of O'Connor since it does not disclose or suggest altering O'Connor's two straight ribs so as to be curved. Without such suggestion, the rejections are improper and overcome and should be withdrawn.

**2. DT2239069 and Yoshi et al.**

Claims 1-4, 8-11, 15-18, 25-28 and 32-35 were rejected under 35 U.S.C. § 103 as being obvious in view of the '069 reference when combined with Yoshi et al. Applicants traverse this rejection for several reasons. First, claims 1 and 15 have been canceled rendering their rejection moot.

As pointed out above in Section A.2, the '069 reference fails to teach using curved ribs. Yoshi et al. does not cure the deficiencies of the '069 reference since it does not disclose or suggest altering the two straight ribs of the '069 reference so as to be curved. Without such suggestion, the rejections are improper and overcome and should be withdrawn.

**3. European Ref. No. 0179381 and European Ref. No. 0081448**

Claims 22-24 were rejected under 35 U.S.C. § 103 as being obvious in view of the '381 reference when combined with European reference 0081448 ("the 448 reference"). Applicants traverse this rejection. As pointed out above in Section B, the '381 reference fails to teach having elements 12 and 13 only attached to an end of the element 11. The '448 reference does not cure the deficiencies of the '381 reference since it does not disclose or suggest the elements 12 and 13 of the '381 reference being unattached to elements 12 and 13 of an adjoining element 11 since that is the sole function of elements 12 and 13.



If the rejection is based on a single element 11 that is unattached to other elements 11, then the rejection is overcome since independent claims 2 and 16 have been amended to clarify that the tube contains a heat exchanging medium. Since there is no disclosure or suggestion in either the '381 reference or the '448 reference to have an isolated element 11 as disclosed in the '381 reference contain a heat exchanging medium, the rejection is overcome.

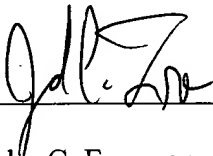
Please note that the amendment to claim 34 is being presented to provide additional coverage for a heat exchanger system by amending its dependency. Furthermore, claims 3, 4, 9-11 and 33 are being amended to redefine/rename the invention a "heat exchanger tube system." Accordingly, the amendments are not being presented for reasons of patentability as defined in *Festo*.

### **CONCLUSION**

In view of the arguments above, Applicant respectfully submits that all of the pending claims 2-4, 8-14, 16-18 and 22-35 are in condition for allowance and seeks an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve

any remaining issues, he is respectfully requested to contact the undersigned attorneys at  
(312) 321-4200.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John C. Freeman", is written over a horizontal line.

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